

ABSTRACT OF DISCLOSURE

A digital image capture device including circuits capable of measuring the distance between the image capture device and an imaged object allows the capture of three-dimensional data of the surface of the object facing the image capture device. The distance data is obtained by the addition of a flash unit, and very high resolution timers to multiple pixels within the image capture device to measure the time required for the flash to reflect from the object. Since the speed of light is constant, the distance from the flash to the object to the image capture device may be calculated from the delay for the light from the flash to reach the device. Multiple pixels may be used to construct a three-dimensional model of the surface of the object facing the image capture device. Multiple images including distance data may be taken in order to generate a complete three-dimensional model of the surface of the object.

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